

PROCEEDINGS
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NEW BULIMULUS FROM THE GALAPAGOS ISLANDS
AND PERU.

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Among some alcoholic specimens collected by the "Albatross" at the Galapagos Islands in 1887-8, were two small specimens belonging to the section *Naesiotus* which were overlooked at the time of Dr. Stearns' report of 1893.* Being engaged on a report on a collection made during the California Academy of Sciences Galapagos Expedition of 1905-6, it seemed proper to describe the above mentioned species in order that they might be included in the general summary of the landshell fauna.

***Bulimulus (Naesiotus) saeronius* n. sp.**

Shell very small, smooth, short-conic, the last whorl much the largest, five-whorled, the apex dimpled, the apical whorl delicately transversely striated, the suture deep, widening and becoming channelled on the last whorl; the whorl in front of it minutely crenulately margined; color pale straw yellow, with an obscure, darker, narrow peripheral band on the last whorl; base rounded, more or less transversely wrinkled, with a narrow umbilical perforation; margin of aperture continuous, sharp, expanded, internally thickened; pillar lip white, very solid, with a prominent median tubercle; body with a relatively large, prominent tooth, which is but little prolonged into the interior of the whorl; the outer lip has no callosity. Height, 7.0; max. diameter, 4.5; height of last whorl, 4.5; of the aperture, 3 mm.

Indefatigable Island, Galapagos group. U. S. Str. Albatross. Cat. No. U. S. Nat. Mus. 274,097.

Of the group of species with a denticulated aperture which is peculiar to this island, this is the smallest.

* Proc. U. S. Nat. Mus., vol. XVI, No. 942.

Bulimulus (Naesiotus) trogonius n. sp.

Shell small, olivaceous, with five and a half whorls separated by a very distinct suture; pupiform, with a rather blunt dimpled apex, the initial whorl conspicuously transversely striated; sculpture of minute regular transverse (or axial) wrinkles crossed by microscopic spiral bands where the wrinkles are interrupted or modified; last whorl subcylindric, much the largest; base attenuated, with a minute umbilical chink; aperture small, simple, sharp-edged, the outer and pillar lips connected by a layer of callus; pillar short, stout, anteriorly subtruncate within the aperture. Height of shell, 7.0; of last whorl, 5.0; of aperture, 2.5; max. diameter of shell, 3.0 mm.

Albemarle Island, Galapagos group, at an altitude of about 1300 feet above the sea. U. S. S. Albatross. Cat. No. U. S. Nat. Mus. 274,096.

This is the smallest species of *Naesiotus* yet recorded. It belongs to the group of *B. amastroides* Ancy, and may well represent the stock from which the varied *Bulimulus* fauna of the islands has been gradually evolved by modification and isolation.

Paul Reibisch described a species of *Pupilla* under the name of *wolffi* which he supposed to be the same as the *P. wolffi* of Miller, originally from Guayaquil on the mainland. Dr. Pilsbry informs me that the Galapagos species is not the same as the continental *wolffi*, and therefore I propose for it the specific name **reibischi**. Reibisch's *P. clausa* and *P. munita* seem sufficiently distinct. Reibisch's *Bulimulus acutus* is not the same as the much earlier *B. acutus* Leach, and may take the name of **rugatinus**. His *B. terebra* is not the same as *B. terebra* Matheron 1832 (fide Pilsbry), but the latter I have not yet been able to consult, and it may be a *Buliminus*. The name *venustus* Reibisch is preoccupied by Beck in 1838, but Reibisch's name is a synonym of *ustulatus* Sowerby. *Bulimulus vermiculatus* Dall (not of Beck, 1838) is a synonym of *B. cinereus* Reibisch, but the latter is preoccupied by Reeve in 1848, and the species may take the name of **cinerarius**.

Bulimulus (Scutalus?) apurimacensis n. sp.

Shell of moderate size, dull whitish with axial more flesh colored streaks, the interior of the aperture light yellowish brown; spire acute, of seven whorls, the nuclear whorls reddish brown, transversely delicately striate, the apex dimpled; base with a wide funicular umbilical pit, above minutely perforate; whorls moderately convex, suture distinct, not appressed or channelled; sculpture of the last four whorls of retractively oblique fine axial threads regularly disposed, with about equal interspaces, covering the entire shell, but a little less distinct near the aperture; outer and inner lips approximated, connected over the body with a thin layer of callus, aperture egg-ovate, the lip widely reflected and sharp, the pillar simple; a section shows that above the perforation in the last whorl the hollow of the axis expands, funnel-like, and in the next preceding whorl is anteriorly contracted and posteriorly expanded, and similarly

throughout the spire. Measurements of the largest, medium and smallest specimens in millimeters are as follows, the great majority being of medium size:

Length of shell.	of last whorl.	aperture.	diameter.
32.0	20	15	20
31.0	20	15	18
24.5	17	12	14

Collected on trees and shrubs near Paseje, Apurimac valley, Peru, by Prof. Hiram Bingham of the Peruvian expedition of the National Geographic Society. Cat. U. S. Nat. Mus. No. 251,835.

The described species nearest to this is the *B. (Scutalus) coræformis* Pilsbry, from the Marañon valley on the east slope of the Andes. The latter is much larger, with a relatively smaller umbilical funnel and a different colored throat.

